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| APPLICATION NO.        |      | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO.        |  |
|------------------------|------|-----------------|----------------------|-------------------------|-------------------------|--|
| 10/623,109             |      | 07/17/2003      | Joerg Boettcher      | 4535                    | 4535 4437               |  |
| 21553                  | 7590 | 02/15/2005      |                      | EXAMINER                |                         |  |
| FASSE PA<br>P.O. BOX 7 |      | ATTORNEYS, P.A. |                      | LINDSEY, RODNEY M       |                         |  |
| HAMPDEN                |      | 4444-0726       |                      | ART UNIT PAPER NUMBER   |                         |  |
|                        |      |                 |                      | 3765                    |                         |  |
|                        |      |                 |                      | DATE MAILED: 02/15/2003 | DATE MAILED: 02/15/2005 |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| -   | Application No.  | Applicant(s)   |         |  |  |  |  |
|---|--|--|---------|--|--|--|--|
|   | 10/623,109   | BOETTCHER ET AL.   |         |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit   |         |  |  |  |  |
|   | Rodney M. Lindsey  | 3765   |         |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply  | pears on the cover sheet with the c  | orrespondence address  |         |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be timy within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communic D (35 U.S.C. § 133). | eation. |  |  |  |  |
| Status  |  |  |         |  |  |  |  |
| 1) Responsive to communication(s) filed on  |  |  |         |  |  |  |  |
| <del>,</del>  | action is non-final.   |  |         |  |  |  |  |
| 3) Since this application is in condition for allowa  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |         |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |  |         |  |  |  |  |
| Disposition of Claims   |  |  | :       |  |  |  |  |
| 4) Claim(s) 1-14 is/are pending in the application  |  |  |         |  |  |  |  |
| 4a) Of the above claim(s) is/are withdra  |  | :  | •       |  |  |  |  |
| 5) Claim(s) is/are allowed.   |  | <i>(</i>   |         |  |  |  |  |
| 6)⊠ Claim(s) <u>1-14</u> is/are rejected.   |  |  |         |  |  |  |  |
| 7) Claim(s) is/are objected to.   |  |  |         |  |  |  |  |
| 8) Claim(s) are subject to restriction and/o  | or election requirement.   |  |         |  |  |  |  |
| Application Papers  |  |  |         |  |  |  |  |
| 9)☐ The specification is objected to by the Examine   | er.  |  |         |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>17 July 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.   |  |  |         |  |  |  |  |
| Applicant may not request that any objection to the   |  |  |         |  |  |  |  |
| Replacement drawing sheet(s) including the correc   | tion is required if the drawing(s) is ob   | jected to. See 37 CFR 1.1  | 21(d).  |  |  |  |  |
| 11) The oath or declaration is objected to by the Ex  | xaminer. Note the attached Office  | Action or form PTO-15  | 2.      |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |  |         |  |  |  |  |
|   | o priority under 35 U.S.C. & 119(a)  | N-(d) or (f)   | ;       |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:   |  |  |         |  |  |  |  |
| 1.⊠ Certified copies of the priority document   | ts have been received.   | ·<br>·   |         |  |  |  |  |
| 2. Certified copies of the priority document  |  | on No.   | •       |  |  |  |  |
| 3. Copies of the certified copies of the prior  |  |  | )       |  |  |  |  |
| application from the International Burea  | •  |  |         |  |  |  |  |
| * See the attached detailed Office action for a list  | of the certified copies not receive  | ed.  |         |  |  |  |  |
|   |  |  |         |  |  |  |  |
|   |  |  |         |  |  |  |  |
| Attachment(s)   | 4) T laba-t 0  | (PTO '412)   |         |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 4) [] Interview Summary<br>Paper No(s)/Mail Da   | ate  |         |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 7/17/3.  | 5) Notice of Informal F<br>6) Other:   | ratent Application (PTO-152)   |         |  |  |  |  |

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### **DETAILED ACTION**

#### Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The specification to which the oath or declaration is directed has not been adequately identified. See MPEP § 602.

# Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 13 "said hole" has no antecedent basis. It appears that claim 13 should properly depend from claim 5 instead of claim 1.

# Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-4, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Culbertson, Jr. Culbertson, Jr. shows in Figure 9 an apparatus comprising a backpack 24, a first sealing and interlocking subsystem 60, 92, 166, a second sealing and interlocking subsystem

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142, 156, a chamber 26 equivalent to a laterally flappable decontamination chamber as claimed, a third sealing and interlocking subsystem 162, 170 and a fourth sealing and interlocking subsystem 64, 116. Note that the suit and vehicle are equivalent to the spacesuit and spacecraft as claimed. With respect to claim 2 note such an arrangement of the first and second subsystems per Figure 9. With respect to claim 3 note the flange on the open end of chamber 26 containing 174 as shown in Figure 12. With respect to claim 4 note the location of the fourth subsystem 64, 116 radially outward of the flange on the open end of chamber 26 as shown in Figure 12. With respect to claim 13 note chamber 26 in Figure 1 functioning as a door. With respect to claim 14 note column 10, lines 18-22 and the donning of the suit. Note that the chamber 26 is inherently pressurized corresponding to the pressure of the working area.

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 5-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Culbertson, Jr. in view of Cohen. With respect to claim 5, Culbertson, Jr. does not teach a hinge between the bulkhead and chamber 26. Cohen teaches old and well known a hinge as at 46 between a bulkhead and a chamber 44. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the apparatus of Culbertson, Jr. with the hinge of Cohen to achieve the advantage of enabling pivoting of the chamber 26 between opened and closed positions. With respect to claim 6 note the flange at 56 of Culbertson, Jr. With respect to claim

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7 note the first subsystem as at 166 of Culbertson, Jr. With respect to claim 8 note such relative positions of the second subsystem and flange 56 as shown in Figure 9 of Culbertson, Jr. With respect to claim 9 note Figure 9 of Culbertson, Jr. and the outward extending flange portion of 56 containing 166 and facing the bulkhead at 50 and suit 22 and the inward extending flange portion of 56 containing 92 and facing the backpack 24. With respect to claim 10 note the seal 166. With respect to claim 11 Culbertson, Jr. does not teach an airlock separated from the working area. Cohen teaches old and well known an airlock 34 separated from a working area. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the apparatus of Culbertson, Jr. with the airlock 34 of Cohen to achieve the advantage of enabling operations to be performed in space environments. With respect to claim 12 Culbertson, Jr. does not teach a separate hinge for tilting the backpack. Cohen at 46 teaches old the use of a hinge to permit pivoting of a closure between opened and closed positions. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the backpack of Culbertson, Jr. with the hinge at 46 of Cohen to achieve the advantage of enabling pivoting of the backpack between opened and closed positions.

#### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note particularly, the latching in Otsuka et al., Pilie' et al., French patent to Vieillefosse and Japanese patent to Okamoto and the craft constructions of Stamper, Facchin, Lanphier et al., Haynes, Von Beckh, Judd and Volkert.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney M. Lindsey whose telephone number is (571) 272-4989. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John J. Calvert can be reached on (571) 272-4983. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rodney M. Lindsey Primary Examiner Art Unit 3765

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